

ArevaEPRDCPEm Resource

From: BRYAN Martin (EXT) [Martin.Bryan.ext@areva.com]
Sent: Monday, April 05, 2010 5:06 PM
To: Tesfaye, Getachew
Cc: DELANO Karen V (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); ROMINE Judy (AREVA NP INC); PANNELL George L (AREVA NP INC); LENTZ Tony F (EXT)
Subject: Response to U.S. EPR Design Certification Application RAI No. 311,FSAR Ch. 16
Attachments: RAI 311 Response US EPR DC.pdf

Getachew,

Attached please find AREVA NP Inc.'s response to the subject request for additional information (RAI). The attached file, "RAI 311 Response US EPR DC.pdf" provides a schedule since a technically correct and complete response to the 2 questions is not provided.

The following table indicates the respective pages in the response document, "RAI 311 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 311 — 16-316	2	2
RAI 311 — 16-317	3	3

A complete answer is not provided for the 2 questions. The schedule for a technically correct and complete response to these questions is provided below.

Question #	Response Date
RAI 311 — 16-316	May 20, 2010
RAI 311 — 16-317	May 20, 2010

Sincerely,

Martin (Marty) C. Bryan
Licensing Advisory Engineer
AREVA NP Inc.
Tel: (434) 832-3016
Martin.Bryan@areva.com

From: Tesfaye, Getachew [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Tuesday, October 13, 2009 8:01 AM
To: ZZ-DL-A-USEPR-DL
Cc: DeMarshall, Joseph; Le, Hien; Kowal, Mark; Hearn, Peter; Colaccino, Joseph; ArevaEPRDCPEm Resource
Subject: U.S. EPR Design Certification Application RAI No. 311 (3839, 3846),FSAR Ch. 16

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on October 9, 2009, and on the October 12, 2009, you informed us that the RAI is clear and no further clarification is needed. As a result, no change is made to the draft RAI. The questions in this RAI are considered potential open items for Phases 2 and 3 reviews. As such, the schedule we have established for your application assumes technically correct and complete responses prior to the start of Phase 4 review. For any RAI that cannot be answered prior to the start of Phase 4 review, it is expected that a date for receipt of

this information will be provided so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager
NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 1290

Mail Envelope Properties (BC417D9255991046A37DD56CF597DB7105C29867)

Subject: Response to U.S. EPR Design Certification Application RAI No. 311,FSAR Ch.
16
Sent Date: 4/5/2010 5:05:58 PM
Received Date: 4/5/2010 5:06:07 PM
From: BRYAN Martin (EXT)

Created By: Martin.Bryan.ext@areva.com

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Files	Size	Date & Time
MESSAGE	2190	4/5/2010 5:06:07 PM
RAI 311 Response US EPR DC.pdf		62111

Options

Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Response to

Request for Additional Information No. 311 (3839, 3846), Revision 0

10/13/2009

U. S. EPR Standard Design Certification

AREVA NP Inc.

Docket No. 52-020

SRP Section: 16 - Technical Specifications

Application Section: FSAR Ch. 16

QUESTIONS for Technical Specification Branch (CTSB)

Question 16-316:

POTENTIAL OPEN ITEM

An RAI was written to address the fact that Table 3.3.1-2 of the GTS identifies setpoint values as Limiting Trip Setpoints (LTSPs), while the FSAR, Chapter 15, Table 15.0-7 (Reactor Trip Functions) and Table 15.0-8 (ESF Actuation Functions), appear to identify the same values as Nominal Trip Setpoints (NTSPs). A detailed review of the RAIs issued and the responses received indicates that the referenced RAI was never actually submitted. The staff submits the following RAI Question to resolve the setpoint discrepancies.

Provide the additional information and any changes necessary to resolve the conflicts between setpoint values presented in the proposed technical specifications and the values presented in the FSAR 15 accident analysis.

There are discrepancies between Table 3.3.1-2, "Acquisition and Processing Unit Requirements Referenced from Table 3.3.1-1," and Chapter 15 Tables 15.0-7, "Reactor Trip Setpoints and Delays Used in the Accident Analysis," and 15.0-8, "Engineered Safety Features Actuation System (ESFAS) Functions Used in the Accident Analysis," with respect to the setpoint values as presented. The following are examples.

1. For reactor trip functions, Table 3.3.1-2 shows the setpoint values as Limiting Trip Setpoints (LTSPs), while FSAR Table 15.0-7 shows the same values as Nominal Trip Setpoints (NTSPs) for functions 3 through 18. Table 15.0-7 distinctly identifies Normal and Degraded uncertainties for each signal.
2. Similarly, for ESF actuation functions, Table 3.3.1-2 shows the setpoint values as Limiting Trip Setpoints, while FSAR Table 15.0-8 appears to show Nominal Trip Setpoint values and Normal and Degraded uncertainties for each signal. The setpoint values shown are the same in both tables for several functions (for example, functions 2.c, 2.d, 3, and 4).

LTSPs were defined in Bases B 3.3.1 and in Reference 1 of B 3.3.1, as equivalent to a Limiting Safety System Setting (LSSS). The NTSP was defined in Reference 1 as the actual setting value for the trip function, which accounts for various instrumentation loop uncertainties including margin for conservatism to ensure the analytical limit is not exceeded. The LTSP and NTSP values cannot be the same, as presented in the various FSAR Tables cited above, because there would be no margin between them.

The additional information is needed to resolve setpoint discrepancies between the EPR GTS, Table 3.3.1-2, and Chapter 15 Tables 15.0-7 and 15.0-8.

Response to Question 16-316:

A response to this Question will be provided by May 20, 2010.

Question 16-317:

POTENTIAL OPEN ITEM

Follow-up to RAI Question No. 16-293

In RAI 16-293, the applicant was asked to provide an assessment to confirm that all the LCO values in the proposed TS are consistent with the initial conditions assumed in the safety analyses. The staff, in particular, cited the proposed pressurizer minimum water level of 75% specified in LCO 3.4.9.a as an example where a TS requirement is not consistent with the initial condition assumed in the safety analyses (e.g., a pressurizer water level of 59% is assumed in heat-up transients in FSAR Section 15.2). In its response letter dated September 30, 2009, the applicant proposed to revise LCO 3.4.9.a and the associated discussion in the TS Bases B 3.4.9 to reflect the assumed value of 59% in a feedwater line break event which is identified as the limiting event for pressurizer water level concerns. The staff finds the revised LCO 3.4.9.a and its associated TS Bases B 3.4.9 acceptable, however, the requested assessment of all the LCO values proposed in the EPR GTS is not provided. The applicant is requested to provide an overall assessment as stated in the original RAI 16-293. This is identified as an open item in the SER w/OI for Chapter 16 of the EPR FSAR.

Response to Question 16-317:

A response to this Question will be provided by May 20, 2010.